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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,580	02/09/2004	Bruce S. Jones	NUKZ 2 00339	3207

27885 7590 10/26/2007  
FAY SHARPE LLP  
1100 SUPERIOR AVENUE, SEVENTH FLOOR  
CLEVELAND, OH 44114

EXAMINER
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MARTIN, LAURA E

ART UNIT	PAPER NUMBER
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2853

MAIL DATE	DELIVERY MODE
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10/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/774,580	Applicant(s) JONES, BRUCE S.	
	Examiner Laura E. Martin	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-14,16,17 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) 16,17 and 19-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of claims 1 and 3-14 in the reply filed on 9/13/07 is acknowledged.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle (US 2002/0130473) in view of Jones et al. (US 20020191059).

**Doyle discloses the following claim limitations:**

As per claim 1: a seal member, said seal member comprising a substantially V-shaped first surface having a first vertex and a substantially V-shaped second surface having a second vertex (figure 5), wherein said first surface faces away from said second surface (figure 5), wherein said surfaces are on opposite exterior sides of said member, and said surfaces are adapted to be compressed when said seal member is installed in said outlet passage [0019].

As per claim 11: the seal member engages an inner wall of said outlet passage (figure 5, element 31).

**Doyle does not disclose the following claim limitations:**

As per claim 1: a housing having a chamber formed therein for receiving ink and a surface including an outlet passage communicating with the chamber and through which ink is dispensed; and an air impermeable, non-porous seal member.

As per claim 7: the seal member is formed of a rubber.

As per claim : the seal member is formed of a polyvinyl chloride (PVC).

As per claim 9: the seal member is formed of a thermoplastic rubber.

As per claim 10: the seal member is formed of a silicone rubber.

As per claim 12: the seal member includes a thin membrane extending across the first surface of the seal member, said thin membrane adapted to be selectively pierced by a needle of an associated printer.

As per claim 13: the seal member has a substantially disk shape.

As per claim 14: the outlet passage includes a counterbore at an outer terminal end that receives the disk-shaped seal member therein.

**Jones et al. discloses the following claim limitations:**

As per claim 1: a housing having a chamber formed therein for receiving ink and a surface including an outlet passage communicating with the chamber and through which ink is dispensed; and an air impermeable, non-porous seal member [0007].

As per claim 7: the seal member is formed of a rubber [0008].

As per claim 8: the seal member is formed of a polyvinyl chloride (PVC) [0008].

As per claim 9: the seal member is formed of a thermoplastic rubber [0008].

As per claim 10: the seal member is formed of a silicone rubber [0008].

As per claim 12: the seal member includes a thin membrane extending across the first surface of the seal member [0019], said thin membrane adapted to be selectively pierced by a needle of an associated printer [0003].

As per claim 13: the seal member has a substantially disk shape [0019].

As per claim 14: the outlet passage includes a counterbore at an outer terminal end that receives the disk-shaped seal member therein (claim 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the seal member taught by Doyle with the area where the disclosure of Jones et al. in order to provide low leak rates. Also, it is well known in the art that a seal has a plethora of uses, including plugging a cartridge.

Claims 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle (US 2002/0130473) and Jones et al. (US 20020191059), and further in view of Putman et al. (US 20030081085).

**Doyle as modified disclose the following claim limitations:**

The ink container of claim.

As per claim 5, Doyle discloses a seal being linearly compressed [0019] and figure 5.

As per claim 5: Jones et al. discloses the seal (figure 1, element 28) adapted to be between said cap (figure 1, element below 28) and said outlet passage (figure 1, element 24). While Jones et al. do not specifically teach linear compression, it would have been obvious to one of ordinary skill in the art at the time of the invention that if the

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seal was held in place by the cap between the cap and the outlet port, there would be some type of compression as the seal is being held in place between the two objects.

**Doyle as modified does not disclose the following claim limitations:**

As per claim 3: a cap member having a recess for receiving said outlet passage.

As per claim 6: the cap is formed of plastic.

**Putman et al. discloses the following claim limitations:**

As per claim 3: a cap member having a recess for receiving said outlet passage (figure 1, element 80).

As per claim 6: the cap is formed of plastic [0025].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink container and method taught by Doyle as modified with the disclosure of Putman et al. in order to provide for a higher quality ink container with less leaking.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle (US 2002/0130473) and Jones et al. (US 20020191059), and further in view of Qingguo et al. (US 20030128257) and Putman et al. (US 20030081085).

**Doyle as modified discloses the following claim limitations:**

The ink container of claim 1.

**Doyle as modified does not disclose the following claim limitations:**

The outer terminal end of said outlet passage comprises a generally triangular-shaped rib extending at least partially along a circumference thereof for contacting and thermally bonding said cap to said outlet passage.

**Qingguo et al. discloses the following claim limitations:**

The outer terminal end of said outlet passage comprises a generally triangular-shaped rib extending at least partially along a circumference thereof (figure 7A).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink container taught by Doyle as modified with the disclosure of Qingguo et al. in order to provide a better seal.

**Putman et al. discloses the following claim limitations:**

An outer terminal end of said outlet passage comprising a rib extending at least partially along a circumference thereof for contacting and thermally bonding said cap to said outlet passage [0021] and [0025] (the energy from ultrasonic welding produces heat).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink container and method taught by Doyle as modified with the disclosure of Putman et al. in order to provide for a higher quality ink container with less leaking.

***Response to Arguments***

Applicant's arguments with respect to claims 1 and 3-14 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

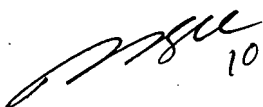
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin

  
10/25/07  
MANISH S. SHAH  
PRIMARY EXAMINER